

# HYDEL® PC-7 ESD

## Polycarbonate

Hydel® PC-7 ESD Polycarbonate is a static dissipative thermoplastic product containing graphic **Fibril™** nanotubes. Unlike conventional carbon fibers, this technology allows for good dimensional stability after machining, outstanding toughness, consistent electrical properties, excellent surface quality, and minimal sloughing. Hydel® PC-7 is available in rod, slab, tubular bar, and profiles.

Property	Method	Value*
Specific Gravity	ASTM D 792	1.22
Water Absorption, 24 hrs	ASTM D 570	0.15
Rockwell Hardness	ASTM D 785	120 R
Ultimate Tensile Strength	ASTM D 638	9,000 psi
Tensile Elongation @ Break	ASTM D 638	8 %
Tensile Modulus	ASTM D 638	333,000 psi
Compressive Strength	ASTM D 695	12,300 psi
Flexural Strength	ASTM D 790	10,800 psi
Flexural Modulus	ASTM D 790	340,000 psi
Notched Izod Impact Strength	ASTM D 256	1.2 ft-lb/in
Deflection Temperature @ 264 psi	ASTM D 648	280°F
Max Continuous Use Temperature	-	260°F
Coefficient of Linear Thermal Expansion (-65°F to 350°F)	ASTM E 831	3.7 x 10 <sup>-5</sup> in/in/°F
Surface Resistance @10 V Surface Resistance @ 100V	EOS/ESD S11.11	10 <sup>7</sup> to 10 <sup>10</sup> ohms/sq 10 <sup>7</sup> to 10 <sup>9</sup> ohms/sq
Volume Resistance @ 10 V Volume Resistance @ 100 V	ESD-STM 11.12	10 <sup>7</sup> to 10 <sup>10</sup> ohm-cm 10 <sup>7</sup> to 10 <sup>9</sup> ohm-cm
Static Decay	FTMS-101C Method 4046	0.02 sec
Residual Voltage	-	0.00 V

\*Typical physical property data generated from test specimens machined from extruded product.

We believe this information is the best currently available on the subject. It is subject to revision as additional knowledge and experience is gained. Ensinger-Hyde makes no guarantee of the results and assumes no obligation of liability whatsoever in connection with this information. Anyone intending to use recommendations obtained in this publication should first satisfy himself that the recommendations are suitable for his use and meet all appropriate safety and health standards. This publication is not a license to operate under, or intended to suggest infringement of any existing patents. References to products of manufacture do not indicate endorsement of named products or unsuitability of other similar products.



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**HEADQUARTERS**  
365 Meadowlands Boulevard  
Washington, Pennsylvania 15301  
**Telephone:** 800-243-3221 *Sales*  
800-869-4029 *Technical*  
**Fax:** 724-746-9209  
e-mail: sales@ensinger-ind.com

**CANADA**  
Ensinger-Plastifab  
8115 Lafrenais Street  
Montreal, Quebec H1P 2B1  
**Telephone:** 514-325-9840  
**Fax:** 514-325-5222  
Web site: www.plastifab.ca  
e-mail: infoprod@plastifab.ca